

=> d his ful

(FILE 'HOME' ENTERED AT 15:33:29 ON 17 SEP 2004)

FILE 'REGISTRY' ENTERED AT 15:33:36 ON 17 SEP 2004

L1 1 SEA ABB=ON SALICYLIC ACID/CN
L2 1 SEA ABB=ON METHANESULFONIC ACID/CN
E METHANESULFONIC ACID/CN
L3 1 SEA ABB=ON ISOBUTYLENE/CN
L4 1 SEA ABB=ON PROPYLENE TRIMER/CN
L5 1 SEA ABB=ON PROPYLENE TETRAMER/CN
L6 1 SEA ABB=ON 1-HEXENE/CN
L7 1 SEA ABB=ON 1-DECENE/CN
L8 1 SEA ABB=ON 1-DODECENE/CN
L9 1 SEA ABB=ON 1-TETRADECENE/CN
L10 1 SEA ABB=ON 1-OCTADECENE/CN
L11 1 SEA ABB=ON 1-EICOSENE/CN
L12 1 SEA ABB=ON 1-DOCOSENE/CN
L13 1 SEA ABB=ON 1-TETRACOSENE/CN

FILE 'HCAPLUS' ENTERED AT 15:38:35 ON 17 SEP 2004

L14 327 SEA ABB=ON (?ALKYLSALICYLIC? OR ?ALKYL? (W) ?SALICYLIC?) (W) ?ACID?
?
L15 173 SEA ABB=ON L14 AND (?PRODUC? OR ?PROCES? OR ?SYNTHESE?)
L16 24 SEA ABB=ON L15 AND (L1 OR ?SALICYLIC? (W) ?ACID?) AND (?OLEFIN?
OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR L10 OR L11 OR L12
OR L13 OR ?ISOBUTYLENE? OR ?PROPYLENE? (W) (?TRIMER? OR ?TETRAMER?
?) OR 1 (W) (?HEXENE? OR ?DECENE? OR ?DODECENE? OR ?TETRADECENE?
OR ?OCTADECENE? OR ?EICOSENE?))
L17 646 SEA ABB=ON (L1 OR ?SALICYLIC? (W) ?ACID?) AND (?OLEFIN? OR L3
OR L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR L10 OR L11 OR L12 OR
L13 OR ?ISOBUTYLENE? OR ?PROPYLENE? (W) (?TRIMER? OR ?TETRAMER?)
OR 1 (W) (?HEXENE? OR ?DECENE? OR ?DODECENE? OR ?TETRADECENE? OR
?OCTADECENE? OR ?EICOSENE?))
L18 1 SEA ABB=ON L17 AND (?PERFLUOROALKYLSULFONIC? OR ?ALKYLSULFONIC
?) (W) ?ACID?
L19 12622 SEA ABB=ON L17 AND (?PERFLUOROALKYLSULFONIC? OR ?ALKYLSULFONIC
?) (W) ?ACID? OR ?ACIDIC? (W) ?CLAY? OR L2 OR ?METHANESULFONIC? (W) ?
ACID?
L20 6 SEA ABB=ON L17 AND ((?PERFLUOROALKYLSULFONIC? OR ?ALKYLSULFONI
C?) (W) ?ACID? OR ?ACIDIC? (W) ?CLAY? OR L2 OR ?METHANESULFONIC? (W)
?ACID?)
L21 2 SEA ABB=ON L20 AND ?CATAL?
L22 6 SEA ABB=ON L20 OR L21
L23 6 SEA ABB=ON L18 OR L22

FILE 'COMPENDEX, APOLLIT, WPIDS, JICST-EPLUS, JAPIO, EMA, PLASPEC, RAPRA,
PASCAL, BABS' ENTERED AT 15:49:59 ON 17 SEP 2004

L24 2 SEA ABB=ON L23
L25 2 DUP REMOV L24 (0 DUPLICATES REMOVED)

6 cit's from CAPLUS
2 cit's from other
databases

=> d que stat 122

L1 1 SEA FILE=REGISTRY ABB=ON SALICYLIC ACID/CN
 L2 1 SEA FILE=REGISTRY ABB=ON METHANESULFONIC ACID/CN
 L3 1 SEA FILE=REGISTRY ABB=ON ISOBUTYLENE/CN
 L4 1 SEA FILE=REGISTRY ABB=ON PROPYLENE TRIMER/CN
 L5 1 SEA FILE=REGISTRY ABB=ON PROPYLENE TETRAMER/CN
 L6 1 SEA FILE=REGISTRY ABB=ON 1-HEXENE/CN
 L7 1 SEA FILE=REGISTRY ABB=ON 1-DECENE/CN
 L8 1 SEA FILE=REGISTRY ABB=ON 1-DODECENE/CN
 L9 1 SEA FILE=REGISTRY ABB=ON 1-TETRADECENE/CN
 L10 1 SEA FILE=REGISTRY ABB=ON 1-OCTADECENE/CN
 L11 1 SEA FILE=REGISTRY ABB=ON 1-EICOSENE/CN
 L12 1 SEA FILE=REGISTRY ABB=ON 1-DOCOSENE/CN
 L13 1 SEA FILE=REGISTRY ABB=ON 1-TETRACOSENE/CN
 L17 646 SEA FILE=HCAPLUS ABB=ON (L1 OR ?SALICYLIC?(W)?ACID?) AND
 (?OLEFIN? OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR L10 OR
 L11 OR L12 OR L13 OR ?ISOBUTYLENE? OR ?PROPYLENE?(W)?TRIMER?
 OR ?TETRAMER?) OR 1(W)?HEXENE? OR ?DECENE? OR ?DODECENE? OR
 ?TETRADECENE? OR ?OCTADECENE? OR ?EICOSENE?)
 L20 6 SEA FILE=HCAPLUS ABB=ON L17 AND ((?PERFLUOROALKYLSULFONIC? OR
 ?ALKYLSULFONIC?) (W)?ACID? OR ?ACIDIC?(W)?CLAY? OR L2 OR
 ?METHANESULFONIC?(W)?ACID?)
 L21 2 SEA FILE=HCAPLUS ABB=ON L20 AND ?CATAL?
 L22 6 SEA FILE=HCAPLUS ABB=ON L20 OR L21

=> d ibib abs 123 1-6

L23 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:414680 HCAPLUS
 DOCUMENT NUMBER: 140:409406
 TITLE: Method for producing lubricant detergents
 INVENTOR(S): Muir, Ronald J.
 PATENT ASSIGNEE(S): Can..
 SOURCE: U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004097750	A1	20040520	US 2003-674896	20030929
WO 2004041767	A1	20040521	WO 2003-US33461	20031015

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
 GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
 LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
 OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
 TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
 GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-422493P P 20021031
 US 2003-674896 A 20030929

AB The invention is a process for producing alkaline earth metal salicylates for
 use as lubricant detergents and to compns. prepared by the process. The
 process comprises two steps. Step 1 is the alkylation of

salicylic acid is conducted using C 14 or greater linear α -olefins to produce alkyl salicylic acids in com. acceptable yields. The alkylation conditions produce predominately mono-substituted para alkyl salicylic acids that are oil soluble. Step 2 is the oil soluble acid is subsequently neutralized and overbased by carbonation of lime using CO₂ in the presence of a promoter and a surfactant. The reaction mixture after overbasing is filtered and solvents are removed by distillation. Alternatively, alkyl salicylic acid can be reacted with a previously overbased alkaline earth sulfonate, e.g., calcium sulfonate, to produce alkaline earth salicylate salts comprising varying percentages of dispersed alkaline earth carbonate salts. In this method, no filtration of the end product is required, and, thus, it is com. preferred.

L23 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:412907 HCAPLUS
DOCUMENT NUMBER: 140:409403
TITLE: Method for the catalytic alkylation of salicylic acid with C₂+4 alkenes
INVENTOR(S): Hobbs, Steven J.
PATENT ASSIGNEE(S): Crompton Corporation, USA
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

Same Inventor as PET

NPA

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004041766	A1	20040521	WO 2003-US33498	20031022
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004127743	A1	20040701	US 2003-691390	20031021
PRIORITY APPLN. INFO.:			US 2002-422492P	P 20021031
			US 2003-691390	A 20031021

AB A process is disclosed for the production of alkylsalicylic acids which comprises reacting salicylic acid with an olefin having at least four carbon atoms (e.g., 1-tetradecene) at elevated temperature in the presence of a perfluoroalkylsulfonic acid, an alkylsulfonic acid (e.g., methanesulfonic acid), or an acidic clay as a catalyst. These alkylated salicylic acids can be overbased to form useful lubricating oil additives (no data).

L23 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:850207 HCAPLUS
DOCUMENT NUMBER: 137:364345

TITLE: Detection of nucleic acid heteroduplexes by anion-exchange chromatography
 INVENTOR(S): Taylor, Paul D.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U. S. Ser. No. 687,834.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002164589	A1	20021107	US 2001-756070	20010106
PRIORITY APPLN. INFO.:			US 2000-194652P	P 20000404
			US 2000-687834	A2 20001011

AB The present invention describes a method for separating or partially separating heteroduplex and homoduplex DNA mols. in a mixture. In the method, the mixture is applied to an anion-exchange chromatog. medium. The heteroduplex and homoduplex mols. are eluted with a mobile phase containing an eluting salt, including an anion and a cation, a buffer, and preferably including an organic solvent. The eluting is carried out under conditions effective to at least partially denature the heteroduplexes (e.g., thermal or chemical denaturing) resulting in the separation of the heteroduplexes from the homoduplexes. The method has many applications including, but not limited to, detecting mutations and comparative DNA sequencing.

L23 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:691656 HCAPLUS
 DOCUMENT NUMBER: 137:369906
 TITLE: Manganese-Catalyzed Epoxidations of Alkenes in Bicarbonate Solutions
 AUTHOR(S): Lane, Benjamin S.; Vogt, Matthew; DeRose, Victoria J.; Burgess, Kevin
 CORPORATE SOURCE: Department of Chemistry, Texas A&M University, College Station, TX, 77842-3012, USA
 SOURCE: Journal of the American Chemical Society (2002), 124(40), 11946-11954
 CODEN: JACSAT; ISSN: 0002-7863
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 137:369906

AB Epoxides were prepared from a variety of alkenes in 51-99% yields by epoxidn. of alkenes in sodium bicarbonate buffer in the presence of manganese (II) sulfate with hydrogen peroxide as the terminal oxidant. A variety of metal **catalysts** were screened for epoxidn. activity; only manganese salts gave effective yields of epoxides, particularly manganese (II) salts. Many additives were screened; when tert-butanol is used as the cosolvent, sodium acetate is the most effective additive, while when DMF is used as a cosolvent, **salicylic acid** is the most effective additive. The effectiveness of additive depends on the concentration of additive; at higher concns., the beneficial effects of additives decrease, in some cases decreasing the yields of epoxides. 6 Mol% of sodium acetate and 4 mol% of **salicylic acid** were found to be the optimal amts. of additives when tert-butanol and DMF were used, resp., as cosolvents for epoxidn. The additives increased the rates of epoxidn. by 100-200%, gave higher yields with less reactive alkenes, and decreased the amount of hydrogen peroxide necessary for

complete reaction. Epoxides were prepared from aryl-substituted, cyclic, and trialkyl-substituted alkenes using 10 equiv of hydrogen peroxide; terminal monosubstituted alkenes such as 1-octene did not react, even in the presence of additives. Peroxymonocarbonate, HCO_4^- , is formed in the manganese-catalyzed epoxidns. in sodium bicarbonate buffer with either tert-butanol or DMF as cosolvents as detected by ^{13}C NMR; without manganese, minimal epoxidn. activity is observed. The yield of epoxide falls as the pH value of the buffer increases, implying that peroxybicarbonate is the oxidant in solution rather than peroxy carbonate. EPR studies show that manganese (II) ions are initially consumed but are regenerated toward the end of the epoxidn., presumably when the hydrogen peroxide is spent. Possible mechanisms for the reaction are discussed. Manganese (II) salts are less toxic and less expensive than other epoxidn. catalysts, do not require ligands, and act as epoxidn. catalysts in nontoxic and inexpensive solvents. The ready isolation of products by neutral extraction both provides product more simply and inexpensively than other methods and allows for simple preparation and isolation of acid-sensitive epoxides which in other methods decomposed under acidic workup conditions.

REFERENCE COUNT: 97 THERE ARE 97 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:107491 HCAPLUS

DOCUMENT NUMBER: 136:136667

TITLE: Acid compositions for cleaning and disinfecting surfaces

INVENTOR(S): Trauten, Rita; Wershofen, Thomas; Kuepper, Stefan

PATENT ASSIGNEE(S): Henkel Ecolab GmbH & Co. OHG, Germany

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002010325	A1	20020207	WO 2001-EP8276	20010718
W: PL				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
DE 10036607	A1	20020214	DE 2000-10036607	20000727
EP 1311653	A1	20030521	EP 2001-978251	20010718
EP 1311653	B1	20040526		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				

PRIORITY APPLN. INFO.: DE 2000-10036607 A 20000727
WO 2001-EP8276 W 20010718

AB A hard surface cleaner and/or disinfectant comprises (a) ≥ 1 acid selected from HCO_2H , AcOH , EtCO_2H , gluconic acid, lactic acid, citric acid, glycolic acid, H_3PO_4 , alkanesulfonic acid, HNO_3 and H_2SO_4 , (b) an C8-14 alkene- or C8-14 alkynecarboxylic acid, especially undecylenic acid (I), and/or other auxiliary agents and/or active ingredients, in H_2O . The acids enhance the cleaning efficiency and reduce the foaming of detergents. For example, a cleaner containing 1.05% H_3PO_4 and 0.2% I in H_2O was more efficient in removing distillers' yeast residues from stainless steel, Al, tin-plated iron or glass surface than aqueous H_3PO_4 or aqueous salicylic acid solution

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:284153 HCAPLUS

DOCUMENT NUMBER: 134:306122

TITLE: Detection of nucleic acid heteroduplex molecules by anion-exchange chromatography

INVENTOR(S): Taylor, Paul D.

PATENT ASSIGNEE(S): Transgenomic, Inc., USA

SOURCE: PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001027331	A2	20010419	WO 2000-US28441	20001012
WO 2001027331	A3	20020516		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1226275	A2	20020731	EP 2000-972158	20001012
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
JP 2004514874	T2	20040520	JP 2001-529461	20001012
PRIORITY APPLN. INFO.:			US 1999-158747P	P 19991012
			US 2000-194652P	P 20000404
			WO 2000-US28441	W 20001012

AB The present invention describes a method for separating heteroduplex and homoduplex DNA mols. in a mixture. In the method, such a mixture is applied to an anion-exchange chromatog. medium. The heteroduplex and homoduplex mols. are eluted with a mobile phase containing an eluting salt, including an anion and a cation, a buffer, and preferably including an organic solvent. The eluting is carried out under conditions effective to at least partially denature the heteroduplexes (e.g., thermal or chemical denaturing) resulting in the separation of the heteroduplexes from the homoduplexes. The method has many applications including, but not limited to, detecting mutations and comparative DNA sequencing.

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L1 1 SEA FILE=REGISTRY ABB=ON SALICYLIC ACID/CN
L2 1 SEA FILE=REGISTRY ABB=ON METHANESULFONIC ACID/CN
L3 1 SEA FILE=REGISTRY ABB=ON ISOBUTYLENE/CN
L4 1 SEA FILE=REGISTRY ABB=ON PROPYLENE TRIMER/CN
L5 1 SEA FILE=REGISTRY ABB=ON PROPYLENE TETRAMER/CN
L6 1 SEA FILE=REGISTRY ABB=ON 1-HEXENE/CN
L7 1 SEA FILE=REGISTRY ABB=ON 1-DECENE/CN
L8 1 SEA FILE=REGISTRY ABB=ON 1-DODECENE/CN
L9 1 SEA FILE=REGISTRY ABB=ON 1-TETRADECENE/CN
L10 1 SEA FILE=REGISTRY ABB=ON 1-OCTADECENE/CN
L11 1 SEA FILE=REGISTRY ABB=ON 1-EICOSENE/CN
L12 1 SEA FILE=REGISTRY ABB=ON 1-DOCOSENE/CN
L13 1 SEA FILE=REGISTRY ABB=ON 1-TETRACOSENE/CN
L17 646 SEA FILE=HCAPLUS ABB=ON (L1 OR ?SALICYLIC?(W)?ACID?) AND
(?OLEFIN? OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR L10 OR
L11 OR L12 OR L13 OR ?ISOBUTYLENE? OR ?PROPYLENE?(W)?TRIMER?
OR ?TETRAMER?) OR .1(W)?HEXENE? OR ?DECENE? OR ?DODECENE? OR
?TETRADECENE? OR ?OCTADECENE? OR ?EICOSENE?)
L18 1 SEA FILE=HCAPLUS ABB=ON L17 AND (?PERFLUOROALKYLSULFONIC? OR
?ALKYLSULFONIC?) (W)?ACID?
L20 6 SEA FILE=HCAPLUS ABB=ON L17 AND ((?PERFLUOROALKYLSULFONIC? OR
?ALKYLSULFONIC?) (W)?ACID? OR ?ACIDIC?(W)?CLAY? OR L2 OR
?METHANESULFONIC?(W)?ACID?)
L21 2 SEA FILE=HCAPLUS ABB=ON L20 AND ?CATAL?
L22 6 SEA FILE=HCAPLUS ABB=ON L20 OR L21
L23 6 SEA FILE=HCAPLUS ABB=ON L18 OR L22
L24 2 SEA L23
L25 2 DUP REMOV L24 (0 DUPLICATES REMOVED)

=> d ibib abs l25 1-2

L25 ANSWER 1 OF 2 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2004-411476 [38] WPIDS

DOC. NO. CPI: C2004-154443

TITLE: Production of alkyl salicylic acids
for use in preparing lubricating oil additives, involves
reacting salicylic acid with
olefin in the presence of
perfluoroalkylsulfonic acid,
alkylsulfonic acid, or acidic
clay catalyst.

DERWENT CLASS: A97 H07

INVENTOR(S): HOBBS, S J

PATENT ASSIGNEE(S): (HOBBS-I) HOBBS S J; (CROM-N) CROMPTON CORP

COUNTRY COUNT: 106

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2004041766	A1	20040521	(200438)*	EN	28
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS					
LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK					
DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP					
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG					
PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC					
VN YU ZA ZM ZW					
US 2004127743	A1	20040701	(200444)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004041766	A1	WO 2003-US33498	20031022
US 2004127743	A1 Provisional	US 2002-422492P	20021031
		US 2003-691390	20031021

PRIORITY APPLN. INFO: US 2003-691390 20031021; US
2002-422492P 20021031

AN 2004-411476 [38] WPIDS

AB WO2004041766 A UPAB: 20040616

NOVELTY - Alkyl **salicylic acids** is produced by reacting **salicylic acid** with at least 4 carbon **olefin** at elevated temperature in the presence of **perfluoroalkylsulfonic acid**, **alkylsulfonic acid**, or **acidic clay** as a **catalyst**.

DETAILED DESCRIPTION - An **INDEPENDENT CLAIM** is also included for a composition comprising an alkyl **salicylic acid** produced from the above process.

USE - For producing alkyl **salicylic acids** (claimed) useful as intermediates in the preparation of lubricating oil additives.

ADVANTAGE - The resulting alkyl **salicylic acids** has very low alkyl phenol content. It has a color that is excellent as compared to that obtained via the Kolbe-Schmitt synthesis. It has acid number approx. 60-95% of the theoretical value
Dwg.0/0

L25 ANSWER 2 OF 2 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2004-410683 [38] WPIDS

DOC. NO. CPI: C2004-154108

TITLE: Production of alkaline earth metal **salicylates** used as lubricant detergents, by alkylating **salicylic acid** with linear **alpha-olefin** with strong acid **catalyst** to form oil soluble alkylated **salicylic acid**, and overbasing by carbonation of lime.

DERWENT CLASS: E12 H07

INVENTOR(S): MUIR, R J

PATENT ASSIGNEE(S): (MUIR-I) MUIR R J; (CROM-N) CROMPTON CORP

COUNTRY COUNT: 106

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2004097750	A1	20040520	(200438)*		8
WO 2004041767	A1	20040521	(200438)	EN	
RW:	AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS				
	LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				
W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK				
	DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP				
	KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG				
	PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC				
	VN YU ZA ZM ZW				

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
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US 2004097750 A1 Provisional US 2002-422493P 20021031
US 2003-674896 20030929
WO 2004041767 A1 WO 2003-US33461 20031015

PRIORITY APPLN. INFO: US 2002-422493P 20021031; US
2003-674896 20030929

AN 2004-410683 [38] WPIDS

AB US2004097750 A UPAB: 20040616

NOVELTY - Production of alkaline earth metal salicylates, comprises alkylating **salicylic acid** with linear alpha - **olefin** comprising at least 14C in the presence of strong acid **catalyst** to form oil soluble alkylated **salicylic acid**; neutralizing alkylated **salicylic acid** and overbasing alkylated **salicylic acid** by carbonation of lime using carbon dioxide in the presence of promoter and surfactant.

DETAILED DESCRIPTION - Production of alkaline earth metal salicylates, comprises alkylating **salicylic acid** with linear alpha-**olefin** comprising at least 14C in the presence of strong acid **catalyst** to form oil soluble alkylated **salicylic acid**; neutralizing alkylated **salicylic acid**; overbasing alkylated **salicylic acid** by carbonation of lime using carbon dioxide in the presence of promoter and surfactant; filtering the product; and removing solvents by distillation.

USE - For producing alkaline earth metal salicylates (claimed) for use as lubricant detergents for lubrication of marine diesel engines including 4 stroke trunk piston engines and 2 stroke cross head engines.

ADVANTAGE - The method results in improved compatibility and solubility, and excellent detergency.
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L2 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:412907 HCAPLUS
 DOCUMENT NUMBER: 140:409403
 TITLE: Method for the catalytic alkylation of
 salicylic acid with C \geq 4
 alkenes
 INVENTOR(S): **Hobbs, Steven J.**
 PATENT ASSIGNEE(S): Crompton Corporation, USA
 SOURCE: PCT Int. Appl., 28 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
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 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004041766	A1	20040521	WO 2003-US33498	20031022
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2004127743 A1 20040701 US 2003-691390 20031021 PRIORITY APPLN. INFO.: US 2002-422492P P 20021031 US 2003-691390 A 20031021				

AB A process is disclosed for the production of **alkylsalicylic acids** which comprises reacting **salicylic acid** with an olefin having at least four carbon atoms (e.g., 1-tetradecene) at elevated temperature in the presence of a perfluoroalkylsulfonic acid, an alkylsulfonic acid (e.g., methanesulfonic acid), or an acidic clay as a catalyst. These alkylated **salicylic acids** can be overbased to form useful lubricating oil additives (no data).

IC ICM C07C051-353
 ICS C07C065-05

CC 51-8 (Fossil Fuels, Derivatives, and Related Products)
 Section cross-reference(s): 48, 67

ST alkylated **salicylic acid** catalytic manuf lubricating oil additive

IT Alkenes, preparation

RL: IMF (Industrial manufacture); PREP (Preparation)
 (C4, alkylation products with **salicylic acid**;
 method for the catalytic alkylation of **salicylic acid**
 with C \geq 4 alkenes)

IT Alkylation catalysts

(acid clays or sulfonic acids for the catalytic alkylation of **salicylic acid** with C \geq 4 alkenes)

IT Clays, uses

RL: CAT (Catalyst use); USES (Uses)
 (acidic; method for the catalytic alkylation of **salicylic acid** with C \geq 4 alkenes using)

IT Perfluoro compounds

- RL: CAT (Catalyst use); USES (Uses)
(alkanesulfonic acids; method for the catalytic alkylation of **salicylic acid** with C \geq 4 alkenes using)
- IT Sulfonic acids, uses
RL: CAT (Catalyst use); USES (Uses)
(alkanesulfonic, perfluoro; method for the catalytic alkylation of **salicylic acid** with C \geq 4 alkenes using)
- IT Sulfonic acids, uses
RL: CAT (Catalyst use); USES (Uses)
(alkanesulfonic; method for the catalytic alkylation of **salicylic acid** with C \geq 4 alkenes using)
- IT Isoalkenes
RL: IMF (Industrial manufacture); PREP (Preparation)
(alkylation products with **salicylic acid**; method for the catalytic alkylation of **salicylic acid** with C \geq 4 alkenes)
- IT Carboxylic acids, preparation
RL: IMF (Industrial manufacture); PREP (Preparation)
(aryl, hydroxy, **salicylic acid**, alkylation products with C \geq 4 alkenes; method for the catalytic alkylation of **salicylic acid** with C \geq 4 alkenes)
- IT Alkylation
(of **salicylic acid** with alkenes)
- IT 75-75-2, Methanesulfonic acid
RL: CAT (Catalyst use); USES (Uses)
(method for the catalytic alkylation of **salicylic acid** with C \geq 4 alkenes)
- IT 69-72-7DP, **Salicylic acid**, alkylation products with C \geq 4 alkenes 111-66-0DP, 1-Octene, alkylation products with **salicylic acid** 112-88-9DP, 1-Octadecene, alkylation products with **salicylic acid** 629-73-2DP, 1-Hexadecene, alkylation products with **salicylic acid** 872-05-9DP, 1-Decene, alkylation products with **salicylic acid** 1120-36-1DP, 1-Tetradecene, alkylation products with **salicylic acid** 1599-67-3DP, 1-Docosene, alkylation products with **salicylic acid** 3452-07-1DP, 1-Eicosene, alkylation products with **salicylic acid** 10192-32-2DP, 1-Tetracosene, alkylation products with **salicylic acid** 15220-87-8DP, Propylene pentamer, alkylation products with **salicylic acid**
RL: IMF (Industrial manufacture); PREP (Preparation)
(method for the catalytic alkylation of **salicylic acid** with C \geq 4 alkenes)
- IT 69-72-7, **Salicylic acid**, reactions 111-66-0, 1-Octene 112-41-4, 1-Dodecene 112-88-9, 1-Octadecene 115-11-7, Isobutylene, reactions 592-41-6, 1-Hexene, reactions 629-73-2, 1-Hexadecene 872-05-9, 1-Decene 1120-36-1, 1-Tetradecene 1599-67-3, 1-Docosene 3452-07-1, 1-Eicosene 6842-15-5, Propylene tetramer 10192-32-2, 1-Tetracosene 13987-01-4, Propylene trimer
RL: RCT (Reactant); RACT (Reactant or reagent)
(method for the catalytic alkylation of **salicylic acid** with C \geq 4 alkenes)